AMENDMENT NO. 2

TO

AGREEMENT FOR ENGINEERING CONSULTING SERVICES
RIVER GROVE DRIVE OVER ESTRELLA RIVER
BRIDGE REPLACEMENT
CONTRACT NO. 300382
FEDERAL PROJECT NO. BRLO-5949(119)

This Amendment No. 2 executed this _____ day of _____, 2015, hereby amends the AGREEMENT made by and between the COUNTY OF SAN LUIS OBISPO ("COUNTY") and Quincy Engineering, Inc., ("ENGINEER") on January 25, 2011, and Amendment No. 1 to said AGREEMENT executed on August 13, 2013, as follows:

1. Under Article 1, "Scope of Work," the Scope of Work attached hereto as "Exhibit A" supersedes and replaces any prior versions of Exhibit A referenced under Article 1. The parties acknowledge that the scope of work has changed from the design of a bridge replacement project to the design of a bridge rehabilitation project.

2. Under Article 2, "Time for Completion of Work," said AGREEMENT is hereby amended to extend the time at which all work shall be completed to no later than January 1, 2018.

3. Under Article 3, "Payment for Services," said AGREEMENT is hereby amended as follows:

   a. Under paragraph A.1, the contract "not to exceed" sum shall be decreased from $665,210.00 to $514,263.29. Accordingly, said AGREEMENT is hereby amended by replacing paragraph A.1 with the following:

      The COUNTY shall pay to ENGINEER as compensation in full for all work required in this AGREEMENT a sum not to exceed $514,263.29, This sum included the fixed fee amount described in Paragraph 3 below, and includes all work listed as optional in the Scope of Work.

      The ENGINEER and the COUNTY acknowledge that this sum includes $198,949.03 in payments already made to the ENGINEER for all work performed prior to this amendment.

b. Under paragraph A.3, the fixed fee shall be decreased from $40,351.20 to $31,307.64 Accordingly, said AGREEMENT is hereby amended by replacing paragraph A.3 with the following:

> In addition, the COUNTY will pay the CONSULTANT a fixed fee of $31,307.64. The fixed fee is nonadjustable for the term of the contract, except in the event an adjustment is made by contract amendment due to significant changes in the scope of work.
>
> The ENGINEER and the COUNTY acknowledge that this fixed fee amount includes fixed fee payments of $12,098.76 already made to the ENGINEER for work performed under prior to this amendment.

c. Under paragraph C, "Invoices," the Cost Proposal attached hereto as Exhibit B supersedes and replaces any prior versions of Exhibit B referenced under Paragraph C of Article 3. The Cost Proposal attached hereto as Exhibit B also supersedes and replaces any Cost Proposal attached as part of Exhibit A of Amendment No. 1.

d. Under paragraph F, "ENGINEER's Assigned Personnel," the Organizational Chart attached hereto as Exhibit C supersedes the Organizational Chart attached to the original AGREEMENT.

4. The effective date of the Amendment No. 2 is immediately upon complete execution by all of the parties.

5. All other terms and conditions of said Agreement shall remain in full force and effect.

IN WITNESS WHEREOF, this AGREEMENT is hereby amended by the parties hereto, upon the date shown signed by the County of San Luis Obispo.

COUNTY OF SAN LUIS OBISPO

_____
Chairperson of the Board of Supervisors
of the County of San Luis Obispo

Date:_____

ATTEST:
County Clerk and Ex-officio Clerk
of the Board of Supervisors of the
County of San Luis Obispo

By:_____
Deputy Clerk

Date:_____

Quincy Engineering, Inc.

By: John Clemmy

Title: President

Date: 1/6/15

APPROVED AS TO FORM AND LEGAL EFFECT:
RITA L. NEAL
County Counsel

By: _____
Deputy County Counsel

Date: 12/29/14

SCOPE OF WORK FOR ESTRELLA RIVER BRIDGE REHABILITATION PROJECT

The Quincy Engineering ("Quincy") Design Team (Team) has already been fully reimbursed for services previously performed on the following tasks from the original Scope of Work which were only partially completed:

- Task 8.1 Administration
- Task 8.2 Meetings
- Task 8.3 Coordination
- Task 9.1-1 Project Management
- Task 9.1-2 Initiation for Environmental Phase
- Task 9.1-3 Technical Engineering Studies
- Task 9.1-4 Draft Environmental Studies & Project Report
- Task 9.2-1 Field Survey
- Task 9.2-2 Geometric Approval Drawings (GAD)

During the development of the Historical Resources Evaluation Report (HRER) and the Historic Property Survey Report (HPSR) in Task 9.1-4, the design team discovered pertinent information regarding the 100-year old truss that could potentially change the national historic eligibility of the existing bridge.

Through coordination with the County and Caltrans, the design team assembled this information and documented it in the HRER and HPSR. This effort was significant and was beyond what had been anticipated, because of all the necessary research and documentation that was required on the bridge, the community, the original bridge designer and contractor. Several coordination meetings with Caltrans, and Local Historic Societies were required.

Upon completing this required research it was concluded by the design team, County and Caltrans that the River Grove Drive Bridge (49C-0307) is eligible for the National Register of Historic Places under Criteria A and C. Under Criterion A the bridge provided a permanent stable crossing over the Estrella River, significantly improving the connection between population centers and farming communities in the region. Under Criterion C the bridge is eligible as a rare and distinct example of a Parker steel truss bridge in San Luis Obispo County.

This information was forwarded along to State Historic Preservation Office (SHPO), and SHPO concurred with these findings. Based on this information, it was determined that the scope of work for this project would change from a replacement project to a rehabilitation project of the historic resource. This project scoping change resulted in the incomplete conclusion of the above listed tasks from the original scope of work. This also required the below revised scope of work going forward.

The following tasks will be performed by the **Quincy** Team for the design of a bridge rehabilitation and approach roadways modification:

Phase I-Preliminary Engineering	Phase 2-Final Design	Phase 3-Bid & Construction Support
• Identify Preliminary Right-of-Way - **Completed** • Hydrology **(Completed)**/Hydraulic Analysis • Preliminary Geotechnical Studies - **Completed** • Bridge Alternatives Analysis • Advanced Planning Studies • Seismic Strategy • Preliminary Roadway Impacts • Utility Conflict Analysis & Coordination (Team & County) • Environmental Surveys & Reports (Team & County) • APE Map • Feasibility/Type Selection Report	• Final Foundation & Materials Reports • Hydraulics Reports (BDHS & LHS) • Bridge Design • Roadway Design • Independent Bridge & Roadway Design Checks • Draft and Final Plans • Specifications & Estimates • Coordinate Utility Relocation (County) • Permit Applications (County) • Construction Schedules	• Bid Assistance **Optional Tasks** • *Pre-Construction Meeting* • *Responding to RFIs* • *Reviewing Contractor Submittals* • *Evaluating Design Changes During Construction* • *Contract Change Order Support* • *As-built Drawings* • *Project Close-out*

Note that the items above that are noted as **Completed**, were done under the previous Replacement Project. Quincy will be utilizing the information, standards, and details for this project as provided by current Caltrans documents/manuals and County standards as appropriate.

All deliverables/products below will be provided in **pdf format** as well as hard copy per County and Caltrans practice. Upon request electronic files (MSWord, Excel, HEC-RAS, AutoCAD dwg format, MSProject, etc.) with all supporting files will also be provided to County in a readily usable format. Plans will be prepared in 2012 AutoCAD Civil 3D utilizing Quincy Engineering CAD standards.

Quincy's Scope of Work for this project is as follows:

PHASE 1 - PRELIMINARY ENGINEERING

TASK 1 - PROJECT MANAGEMENT

Task 1.1 - Project Management

Quincy will provide Project Management tasks that include coordination with the County, Team management, product development tracking, Team and stakeholder communication, and project progress and budget reporting. Quincy will develop, track, and lead the following project management tasks:

- Project Schedule;
- Milestone PDT meetings in person;
- Monthly PDT teleconference meetings;
- Meeting Agendas, minutes, and Action Item Summaries; and
- Monthly Invoices, Progress Reports, and Look-Ahead Summaries.

Task 1 Products:

- Final Scope/Schedule
- Kick-off Meeting
- Project Meetings (6)
- Meeting Agenda & Minutes
- Schedule Updates
- Project Progress Reports

Task 1.2 - Project Meetings

Quincy will lead project meetings:

- A kick-off meeting will be held after the notice to proceed and will introduce the Project Team, establish communication channels, set the project schedule, clarify the scope of work, and define the roles and responsibilities of the various Team members.
- Project Status meetings will be conducted to review project progress at 35%, 65%, and 95% steps. Other meetings will include utility coordination, property owner, project site visits, and public outreach as deemed necessary (total of 6 meetings).

TASK 2 - PRELIMINARY ENGINEERING

Task 2.1 – Basis of Design

Quincy will develop the Basis of Design document to summarize project design criteria and standards.

Task 2.2 – Feasibility Analysis

Quincy will complete:

- Load Rating Analysis based on existing conditions
- Seismic Vulnerability Analysis of existing bridge
- Load Rating Analysis based on rehabilitated condition
- Seismic Vulnerability based on rehabilitated condition
- Evaluation of sufficiency rating of existing bridge condition
- Evaluation of sufficiency rating of rehabilitated bridge condition
- Preliminary Plan and Profile (Geometric Approval Drawings) will be prepared for the proposed rehabilitated structure alternative.
- Alternatives Cost Estimates.

Task 2 Products:

- Basis of Design
- Preliminary Plan & Profile Sheets
- Preliminary Roadway, Bridge & Project Cost Estimates
- Bridge Advance Planning Studies
- Seismic Strategy Meeting – If required
- 35% Plans of Preferred Alternative

Task 2.3– Bridge Advanced Planning Studies (APS)

Quincy will develop bridge Advanced Planning Studies Alternatives which address:

- Improved Load Rating Capacity
- Improved Structural Condition
- Improved Seismic Vulnerability
- Modified structure's portal configuration to address Functionally Obsolete Condition
- Replacement of existing bridge for comparison against rehabilitation (necessary for Environmental Phase)

The bridge APS & Type Selection Documentation will include:

- Feasible alternative bridge types (plan, elevation, and section views), rehabilitation details, and construction methods.
- A description of the advantages and disadvantages of each alternative.
- Roadway impacts related to the various bridge types.
- An "Engineer's Opinion of Probable Construction Cost" for each alternative will be developed.
- Our Team's recommendation as to which of the alternatives is the most appropriate for the site.

Task 2.4 – Seismic Strategy

If required by Caltrans Quincy will develop a separate Seismic Strategy Report which would include:

- Summary of seismic vulnerabilities of existing bridge condition
- Discussion of proposed modifications to reduce seismic risk
- Summary of seismic vulnerabilities of proposed rehabilitated structure

Quincy's intention is that the Feasibility/Type Selection Report will serve the purpose of the Seismic Strategy Report. Close coordination with Caltrans Structures Local Assistance should ensure this.

Task 2.5 – Seismic Strategy Meeting

If required by Caltrans, Quincy would prepare for, attend and lead a Seismic Strategy Meeting with Caltrans.

TASK 3 – HYDROLOGY & HYDRAULICS

WRECO's scope of work assumes two project meetings with Design Team & County and includes:

Data Review (Previously Completed)

WRECO will review the available data, including previous studies, provided by the County and the Project Team. Key information to review will be the County's hydrologic and hydraulic data for Estrella River water body.

Field Reconnaissance (Previously Completed)

WRECO will conduct field reconnaissance to assess existing conditions in vicinity of the Project site. WRECO will verify any existing stream instability and scour issues.

Hydrologic Analyses (Previously Completed)

WRECO will perform hydrologic analyses using two (2) different methods, to estimate design flows such as Q_{50} and Q_{100}. The two methods will be 1) probability study of gaging station flow record and 2) Unit Hydrograph Method.

Task 3 Products:

- Bridge Location Hydraulic Study (Draft & Final)
- Bridge Design Hydraulic Study Report (Draft & Final)
- Summary Floodplain Encroachment Report
- FEMA CLOMR Application (Optional)

Hydraulic Analyses

WRECO will perform hydraulic analyses to determine the flow characteristics of the 100-year, 50-year, and overtopping flows, including water surface elevations (depths) and velocities. The hydraulic computer software of choice will be the U.S. Army Corps of Engineers' HEC-RAS computer program. WRECO will review the creek channel surveyed cross sections provided by the Project Team. A rehabilitation and seismic retrofit of the structure will be evaluated.

Location Hydraulic Study

WRECO will perform a floodplain risk assessment and determine the extent of the floodplain encroachment from the proposed project and determine the needs for any mitigation measures. The results of WRECO's analyses will be documented in the Floodplain Evaluation Report.

Scour Analyses and Countermeasure Design

WRECO will perform bridge scour analyses to determine the scour potential per the methodology specified in the Federal Highway Administration's HEC-18 and HEC-23 Manuals. WRECO will work with the Project Team's bridge and geotechnical engineers to evaluate the need for countermeasures for bridge local scour and long-term stream instability. WRECO will make recommendations for necessary scour countermeasures.

Bridge Design Hydraulic Study

WRECO will prepare the Bridge Design Hydraulic Study for the Project to summarize the recommendations and results from the hydraulic and scour analyses. WRECO will submit the draft report prior to the Project Team's

completion of the Type Selection Report for the County's review and the final report after receiving the review comments from Caltrans and the County.

FEMA CLOMR (Optional Task)

The Project site is designated as Zone A in a FEMA base floodplain. Depending on the level of floodplain impacts from the proposed rehabilitation scheme, a FEMA CLOMR application and approval may be required. As an optional task, WRECO will prepare the CLOMR application package and submit it to FEMA for approval. The proposed effort will include permit coordination and attending one (1) coordination meeting with the FEMA staff.

TASK 4 - GEOTECHNICAL INVESTIGATIONS & REPORTS

FUGRO will complete the Geotechnical Investigation and reports and their scope of work includes:

- **PGR** - Develop Preliminary Geotechnical Report for use by the designer regarding specific geotechnical issues that may affect project planning and preliminary design. – **(Previously Completed by Fugro)**
- **ISA** - Develop the Initial Site Assessment (Phase 1) document to identify any hazardous materials for consideration within the environmental and contract documents. – **(Previously Completed by County)**
- **LOTB** – Conduct soils borings and develop the Log Of Test Borings
- **FR** – Prepare a Foundation Report for use by the bridge designers during final design.
- **MR** – Prepare a Materials Report for use by the roadway designers during final design.

Task 4 Products:

- Bridge Foundation Report (Draft & Final) – 4 copies & electronic
- Log of Test Borings Drawing - electronic

DRAFT MATERIALS AND FOUNDATION REPORT

Fugro will prepare a draft Materials & Foundation Report for the project. The report will be prepared for the bridge retrofit approach. The report will provide recommendations for both the design of the roadway and structure foundations in a single report. It is assumed that the fieldwork for the bridges and roadway can be performed under the same mobilization. The tasks that Fugro will provide for this work are described below:

- Quincy will provide mapping showing the alignment, location of proposed improvements, bridge loading information, and the site topography (suitable for estimating boring elevations and preparing the Log of Test Boring sheet) be provided prior to beginning the field exploration program for the project.
- Fugro will prepare a health and safety plan for the field work, and visit the site to coordinate access for field exploration. We have assumed that environmental studies and special permitting will not be required for explorations performed in the proposed roadway and existing bridge abutment areas.
- Fugro will mark the locations of their planned explorations and contact Underground Services Alert (USA) to review the locations relative to underground utilities. Fugro will not be responsible for damages resulting from buried structures or underground utilities that are not brought to their attention and properly marked at the site.
- Field exploration will be performed to obtain subsurface information for design of the roadway and bridge foundations. A tentative schedule for the field exploration program is summarized below:

Location	Field Exploration	Comments
Bridge Foundations	2 borings to 75 to 100 feet	Provide one boring at each existing bridge abutment location
Roadway	2 borings to depths of 5 feet	Provide borings to evaluate subgrade along the bridge approaches

- **Access and Permitting.** Fugro assumes that proposed roadway improvement areas and existing bridge abutments areas will be accessible to conventional heavy truck-mounted drilling and support equipment and

that special access measures will not be required. Fugro will also obtain an encroachment permit from the County for the field work.

- **Borings.** As planned, the borings will be drilled using a truck-mounted drill rig equipped for both rotary wash drilling (bridge foundation borings) and hollow stem auger drilling (roadway borings). The borings may be deepened or terminated at shallower depths depending on the conditions encountered during drilling. We will sample the borings at approximately 5-foot intervals using standard penetration test (SPT) split spoon and modified California split spoon samplers. The samples will be used to classify the soils encountered, and be retained for subsequent laboratory testing. The bridge foundation borings will be backfilled with the grout and the roadway borings will be backfilled with cuttings at the completion of drilling. We have assumed that water for drilling can be obtained from a nearby fire hydrant.
- **Disposal of Drill Cuttings/Fluids.** Drill cuttings will be drummed and temporarily stored in a selected location near the work area. Analytical tests will be performed on the drummed material and the results used as a basis for assessing disposal options. Upon completion of the testing, the soil/fluid filled drums will be picked up and transported to a suitable disposal site by our drilling subcontractor. Accompanying documentation of the testing and disposal will be acquired. Note, we have assumed that the soils/fluids will be non-hazardous and that the drums can remain onsite for up to a few weeks prior to transport and disposal.
- **Traffic Control.** Fugro will provide traffic control during the course of exploration if work is done inside the traveled way.
- **Laboratory Testing.** Laboratory tests will be performed on selected samples obtained from the field exploration program to assist in our characterization of the geotechnical engineering properties of the materials encountered. Fugro expects to perform tests for soil classification, compaction, shear strength, consolidation, corrosion and R-value.
- **Report.** Fugro will prepare a draft Materials & Foundation Report for the project. The draft report will be submitted in Adobe portable document file (pdf) format for review by the County and the design team. Hard copies of the report can be provided, if requested. Graphics showing the site location, locations of field explorations, and idealized subsurface profiles in the roadway improvement and existing abutment areas will be submitted with the report. Field and laboratory data obtained from the geotechnical study will be included in the report. Additional exploration or evaluation may be recommended based on the results of the work performed.
- **Roadway.** The following opinions and recommendations for roadway will be provided in the report:
  - General cuts and excavations including input to temporary excavations, subdrain requirements, geologic structure, excavation characteristics of on-site soil and rock materials, and estimated rippability;
  - Embankments including suitability of excavated materials for use as fill, moisture control, drainage considerations, and expansive soils, and
  - Structural sections for asphalt concrete pavements based traffic indices provided to us.
- **Bridge.** The following opinions and recommendations regarding foundation design will be provided in the report:
  - Soil and groundwater conditions encountered;
  - Site geology, faulting and seismicity;
  - Potential for geologic hazards to impact the project (such as, seismic shaking, liquefaction, slope instability and lateral spreading, landslides, flooding and inundation, and subsidence);
  - Seismic design criteria for use with Caltrans design methods;
  - Corrosion considerations for design of subsurface structures (minimum cement factors estimated in accordance with Caltrans guidelines);

- Suitable foundations types for the conditions encountered (such as spread footings, driven concrete or steel piles, CISS, or CIDH piles);
- Specified tip elevation, settlement, and size for suitable deep foundation types and class of pile loading considered (up to 2 pile types can be considered);
- Lateral capacity of single pile foundations for free-head and fixed-head conditions based on p-y analysis;
- Pile spacing and group reduction factors for vertical and lateral loads;
- Lateral earth pressures, spring constants, and passive pressure resistance for abutment design;
- Special considerations for approach fill settlements: allowable slope inclinations, waiting periods, and need for monitoring; and
- Construction considerations: need for dewatering, pile driving, CIDH pile construction, adjacent structures, temporary excavations, and shoring.

- Fugro will prepare the draft log of test borings sheets for the bridge. The sheets will be prepared on Caltrans standard plan sheets for log of test borings, and can be modified to incorporate the County's plan sheet border, if requested. A copy of the LOTB will be submitted with the Geotechnical (Bridge Foundation) Report.

FINAL MATERIALS AND FOUNDATION REPORT

- Upon receipt of written comments, Fugro will address the comments and incorporate them into the final Geotechnical Report and Log of Test Borings sheet. The draft report will be revised to incorporate comments, respond to requests for additional information from the design team, and to address design modifications, if needed. The final report will be submitted in Adobe portable document file (pdf) and the Log of Test Boring Sheets will be submitted electronically.

TASK 5 - UTILITY COORDINATION

County will:

- **Utility Letters** - Prepare the A, B, C letters according to County procedures.
- **Coordination** - Coordinate with the utility companies.
- **ROI & NTO** – Prepare Reports of Investigations and Notice to Owner.

Task 5 Products:

- Utility Conflict Map
- Utility A,B, & C Letters
- Caltrans Reports of Investigations
- Caltrans Notice to Owners

Quincy will:

- Incorporate utility information provided by County into the project's PS&E, including special requests for openings when feasible from utility companies.
- Identify potential and/or necessary utility conflicts and provide said information to County.
- Design around and accommodate utilities as required.

TASK 6 - ENVIRONMENTAL CLEARANCE & PERMIT APPLICATIONS

SWCA Environmental Consultants (SWCA) and subconsultants will be supporting the County as necessary based upon the following breakdown:

County will prepare:

- Natural Environment Study (NES)
- Biological Assessment (BA)
- Archaeological Survey Report (update)
- Wetland Delineation
- State agency permitting
- Conceptual Habitat Mitigation and Monitoring Plan (CHMMP)

SWCA will prepare:

- **Project Description** – Develop a project description together with the Team for use in all technical studies environmental documents.
- **Finding of Effect** –

  Project Review

  SWCA architectural historians will review the proposed project plans for conformance with the Secretary of the Interior's Standards for The Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring & Reconstructing Historic Buildings (SOIS). The goal of the Standards is to preserve the historic materials and distinctive character of a historical resource. Use of the SOIS to avoid adverse effects may be considered a standard condition when an undertaking's activities are limited to stabilization, maintenance, repairs, rehabilitation, or alterations and these activities are completed in a manner consistent with the SOIS, the applicable SOIS guidelines, National Park Service Preservation Briefs, and applicable Caltrans guidance. SWCA will work with the project designers to demonstrate how each proposed project element either complies with the SOIS or what refinements would be necessary to achieve compliance.

  Because project design will require collaboration across several disciplines, it is anticipated that this task will also require several rounds of plan review and meetings. SWCA assumes that a maximum of two (2) rounds of plan review and one (1) in person meeting with the project designers and Caltrans will be required to discuss the design and site conditions of the project, and to negotiate an agreement among the participating parties to achieve the required conformance with the Standards. Should additional review and/or any in-person meetings be required, a change order will be required.

  The results of this consultation and review will be summarized in a letter report that will document how the final project design complies with the SOIS, thus avoiding significant adverse effects to historic properties. The report will highlight the character-defining historic elements of the bridge that warrant attention and which features may be altered or removed during the adaptive reuse. The report will be submitted for review and approval by the Caltrans Principal Architectural Historian and the final will be included as supporting documentation in the Finding of Effect document for review by Caltrans and if necessary, SHPO.

  Finding of Effect

  Following preparation of the project review report SWCA will prepare a Finding of Effect (FOE) to assess the project effects on the bridge. The FOE will analyze and address the preferred project and may need to address alternatives that may have been considered, but rejected. Demolition and replacement of the bridge, or rehabilitation that does not follow the SOIS would be an adverse effect to the historic structure. SWCA understands that it is the project objective to comply with the SOIS, which would result in a finding of No Adverse Effect with Standard Conditions, however this will not be confirmed until the project has been reviewed by the architectural historians. SWCA will prepare the FOE in accordance with Caltrans recommendations for the project.

- **Memorandum of Agreement (MOA) (Optional Task)** –

  If the FOE concludes the project will have an adverse effect and Standard Conditions cannot be applied, a Memorandum of Agreement (MOA) will be necessary to identify mitigation measures to reduce that effect and to complete the Section 106 process. SWCA will draft the MOA based on other MOAs prepared for and signed by Caltrans and the State Historic Preservation Officer for recent historic bridge replacement projects. As appropriate, the MOA will incorporate suggestions and requests from interested parties collected during the Section 106 process. The MOA signatories will finalize the document prior to signing it.

- **Section 4(f) Evaluation** –

  Section 4(f) of the U.S. Department of Transportation Act of 1966 requires consideration of park and recreational lands, wildlife and waterfowl refuges, and historic sites in transportation project development.

There are no publicly owned park/recreation facilities or waterfowl and wildlife refuges in the vicinity of the proposed project. However, the River Grove Bridge is considered a Section 4(f) resource as it is currently eligible for the National Register, based on SHPO concurrence with findings from studies conducted by SWCA in 2012. This finding of eligibility is contrary to the Historic Bridge Inventory that was conducted early in 2000. The most recent Historic Bridge Inventory available online has been updated to show the bridge is now eligible to the National Register.

SWCA will consider all prudent and feasible alternatives to the use of each Section 4(f) resource. If avoidance alternatives are determined not to be feasible or prudent, then reasonable measures to minimize harm to the Section 4(f) resource will be identified and incorporated into the project to ensure that the selected alternative would have the least harm to the Section 4(f) resource.

The level of Section 4(f) evaluation is likely to fall under the Programmatic 4(f) for Historic Bridges. However, this decision may be dependent upon the selected alternative and consideration of other potential Section 4(f) resources in the project area (if any). It seems reasonable to assume that the rehabilitation alternative can avoid adverse effects to the bridge. However, if the rehabilitation alternative does result in an adverse effect to the Section 4(f) resource, an additional Section 4(f) evaluation would be necessary.

Should the proposed project result in a CE under NEPA, SWCA would prepare the Section 4(f) Evaluation as a separate document. The Section 4(f) Evaluation would be reviewed and approved by Caltrans and the County.

Task 7 Products:

- Project Description
- Farmlands Review
- Visual Impact Assessment
- Finding of Effect
- Memorandum of Agreement (Optional Task)
- Section 4(f) Evaluation
- Diversion and Dewatering Plan
- CEQA IS/MND
- NEPA Categorical Exclusion (Optional)

- **CEQA Initial Study/Mitigated Negative Declaration**

SWCA will work closely with the engineering team during the design phase and assume that the proposed bridge rehabilitation alternative would result in a finding of No Adverse Effect with Standard Conditions. Under this scenario, SWCA assumes that an Initial Study (IS) leading to a Mitigated Negative Declaration (MND) will be the appropriate CEQA document. However, if a significant unavoidable impact was identified, then a focused Environmental Impact Report (EIR) would be the appropriate level of review.

SWCA will prepare the IS/MND on behalf of the County. SWCA will prepare the CEQA document using the County format, since the County will be the CEQA lead agency. Use of the Caltrans template will not be required. This task also includes publishing of the environmental documents, appropriate noticing, document revisions after public review, preparation of the final MND, and attendance at any public hearings for approval of the MND. Should it become apparent during environmental evaluation that an EIR is needed, the County will be immediately notified for appropriate action.

- **NEPA Categorical Exclusion (by Caltrans, with support from SWCA if needed)**

It is assumed that the appropriate NEPA document will be a Categorical Exclusion (CE) with required technical studies. The federal agencies will use the information within the IS/MND and all technical reports prepared for the project to prepare the CE. Costs for preparing a CE or any other NEPA document are limited to providing environmental technical support and coordination as necessary, as Caltrans typically prepares this document. Should it become apparent during environmental evaluation that an Environmental Assessment (EA) is needed, the County will be notified for appropriate action.

- **Technical Plans** including:

  Diversion and Dewatering Plan - SWCA will assist the team in preparing a Diversion/Dewatering Plan. Quincy Engineering shall prepare the Diversion and Dewatering Plan. The plan shall be prepared under the responsible charge of a civil engineer.

- **Conceptual Habitat Mitigation Monitoring Plan (by County)**
- **Permits (by County)** including:

  Section 404 Permit (ACOE)

  Section 401 Water Quality Certification (RWQCB)

  Section 1600 Streambed Alteration Agreement (CDFW)

TASK 7 - PROJECT FEASIBILITY/TYPE SELECTION REPORT

Quincy will develop a Project Feasibility/Type Selection Report to summarize findings of the completed preliminary engineering work. In summary, the report will include the following:

- Site visit (field investigation) notes
- Design Hydraulic Study
- Preliminary Geotechnical Report
- Preliminary right-of-way information
- Utility relocation/protection information
- Preliminary construction staging & detour requirements
- Preliminary roadway impacts
- Bridge APS drawings and costs
- Bridge Type Selection Discussion
- Summary of environmental studies
- Construction cost estimate for each alternative
- Bridge type selection recommendation
- Schedule to complete final design & construction
- 35% Plans of the preferred alternative

The Project Feasibility/Type Selection Report will be presented to and discussed with the County in draft form. All comments will be addressed and incorporated into the final report. Final design will occur upon concurrence by the County and approval of the environmental documents by Caltrans/FHWA. The approved report will become the basis for the project's final design.

Task 7 Products:

- Draft Feasibility/Type Selection Report
- Final Feasibility/Type Selection Report

PHASE 2 - FINAL DESIGN

This phase of the work plan will commence upon approval / NTP by the County.

TASK 8 - FINAL DESIGN & DETAILING

Task 8.1 – Design & Submittal of 65% Plans (Unchecked Details)

Quincy will develop:

- **Bridge Design:** The final bridge designs will be performed in accordance with AASHTO LRFD Bridge Design Specifications with Amendments by Caltrans and other Caltrans design manuals. Design will be based on the "Load Resistance Factor Design" method, with HL-93 and permit truck design live loads. Seismic design will be performed in accordance with the Caltrans *Seismic Design Criteria*, the latest ARS curve and information available from Caltrans Earthquake Research. Computer analysis and design programs used are "state-of-the-art" for bridge design. **Quincy has assumed the rehabilitation will consist of full truss repainting, truss modifications/repairs, deck replacement, removal of the existing timber walkway, supplemental abutment support construction and abutment modifications to support the new deck. The supplemental abutment design may require temporary support of the existing truss while the new foundation can be constructed. Analysis and evaluation of all of the connections will also be completed during the final design. Modifications of connections will be designed if required.**
- **Approach Roadway Design:** The final approach roadway design will be *completed* in accordance with County Standards, AASHTO's "*A Policy on Geometric Design of Highways and Streets*", Caltrans *Highway Design Manual*, and Caltrans *Standard Specifications*. Final grading and drainage details will be developed as well as new/existing roadway conformance details, as required. Detour plans and project signing will be developed as well as bridge barrier crash protection details. **The roadway approach modifications consist of lowering the roadway grade tapered to conform to the existing roadway elevations. The total assumed roadway design limits are up to 400 feet.**
- **65% Plans Submittal:** The plan sheets will be prepared in CAD (2012 AutoCAD Civil 3D) according to the County's and Caltrans' drafting standards while utilizing Quincy AutoCAD Civil 3D standards. Plans will be prepared *in* English units and will be consistent with current County and Caltrans' Standard Plans. **. 2012 AutoCAD dwg files will be made readily available to County upon request.**

Task 8 Products:

- 65% Roadway & Bridge Plans
- Independent Design Check
- Comment Summary Forms
- Specifications
- Roadway & Structure Quantities
- Quantity Calculations
- Bridge and Check Design Calculations
- Construction Cost Estimate
- QA/QC Checklist
- 95% PS&E
- 100% Final PS&E
- RE Pending File

Task 8.2 - Independent Design Check

- Quincy will provide an independent design and details check of all bridge plans, roadway plans, and element designs. The check will be performed by a licensed engineer that has not previously worked on the project.
- Quincy will complete a comprehensive calculation package of the bridge and foundation systems. Both design and design check calculations will be provided.

Task 8.3 - Specifications

- Quincy will develop the project special provisions (including the County Boiler Plates) based on Caltrans 2010 Standard Special Provisions (SSP).

Task 8.4 - Construction Quantities & Estimate

- Quincy will develop construction quantities and the Team's estimate of construction costs (Q and E). Quantities will be calculated in accordance with Caltrans' practice and segregated into pay items. The estimate, in item list form, will show quantities, unit costs, and a project cost summary.

Task 8.5 - Quality Control & Constructability Review

- A senior level Quincy engineer will review the entire draft PS&E (90% PS&E) package for uniformity and compatibility as well as conformance with the Federal HBP requirements. The review will include comparing bridge plans with the roadway plans for conflicts or inconsistencies, and to ensure that the final design is in accordance with all project documents. Comments will be addressed and resolved.
- A constructability review will be performed by a senior level Quincy engineer on the draft PS&E (90% PS&E) package.
- All QC comments will be summarized and incorporated into the project plans for preparation of the 95% PS&E.
- Following the QC review, an itemized list of the summarized QC comments prepared by the Senior level engineers for both the construction review, and the uniformity and compatibility review will be provided to County.

Task 8.6 - Preparation of 95% (Draft) PS&E

Quincy will prepare the **95% PS&E** including:

- Addressing internal QC review comments on 90% PS&E;
- Updating 11"x17" plans for structure/roadway;
- Combining County Boiler Plate and Special Provisions;
- Detailed construction estimate and working day schedule; and
- Addressing the County's "red-lined" 65% review comments in writing. All conflicts will be resolved.

Task 8.7 - Submittal of 95% (Draft) PS&E

Quincy will:

- Submit the Draft 95% PS&E for County review.
- The submittal will be stamped and signed by the project engineer and will include design plan prints (11"x17"), special provisions, quantity calculations, cost estimates, final bridge and independent check calculations, and construction working day schedule.
- Final Bridge Foundation Report.
- Responses to County's "red-lined" set of 65% PS&E comments.
- PDF files of entire submittal as requested.

TASK 8.8 - 100% PS&E (Final Signed Submittal)

The final plans, specifications and estimate will be submitted to the County with the following:

- Final design plans with title sheet stamped and signed by the project engineer in 11"x17" sizes;
- One original stamped and wet-signed signature page of the Special Provisions;
- Contract Specifications;
- Responses to County's "red-lined" set of 95% PS&E comments;
- Final Engineer's Estimate; and
- Resident Engineer's File produced in the County's format.
- PDF files of entire submittal as requested.
- Final 2012 AutoCAD dwg format files.

TASK 9 - RIGHT-OF-WAY ASSISTANCE

Quincy will:

- Delineate the final right-of-way and/or easement needs for the County, including temporary construction easements.
- Incorporate and make changes that may be required or requested as a result of the right-of-way acquisition process (namely new information becoming available or accommodating a property owners request)

Task 9 Products:

- Final Right-of-Way Delineation

The County will:

- Prepare right-of-way plats and legal descriptions in accordance with County standards for each property owner that shows both permanent takes and temporary construction easements.
- Flag the proposed R/W lines for inspection/approval by the County right-of-way agent and property owner (if permanent right-of-way is required).

The County will be responsible for securing the right-of-way and/or easements.

PHASE 3 - BID ASSISTANCE & CONSTRUCTION SUPPORT

TASK 10 - BIDDING & CONSTRUCTION SUPPORT

Quincy will be available during the bid period to interpret the plans and specifications, prepare addenda if needed, and provide general consultation to the County to obtain bids. When the construction bids are opened, Quincy Engineering will be available to provide analysis and recommendations concerning award of the contract.

Task 10.1 - Bidding Assistance

Quincy will provide the following bidding assistance services for County of San Luis Obispo Public Works

- Respond to technical RFI's received during advertisement
- Make necessary revisions/amendments to the PS&E that may result from RFI's received during the advertisement of the project.
- Attend prebid meeting (optional)

Task 10 Products:

- Bidding Assistance
- Respond to RFIs (Optional)
- Shop Drawing Review (Optional)
- Site Inspection (Optional)

Task 10.2 - Construction Support (optional)

The individuals that were directly involved in the design will be available during construction to interpret the plans and specifications, and provide general consultation to the County. Quincy will be available to provide the following construction support services (as supplemental work via contract amendment) for County of San Luis Obispo Public Works if and when requested:

- Attend pre-construction meeting;
- Review and provide comments on shop plan drawings;
- Respond to post-award requests for information (RFI's);
- Construction site observations; and
- Develop updated plans or plan revisions as needed.
- Prepare As-built drawings.

EXHIBIT B

Cost Proposal

Project Number: S13-900 Project Name: San Luis Obispo County Estrella River Bridge Rehabilitation

No.	TASKS	Project Manager	Senior Engineer-Roadway Project Engineer	Assist Eng.	Senior Engineer-Bridge Project Engineer	Assoc Eng.	Assoc Eng.	Structural Steel Specialist	Drafter	Desgin / Spec. / Estimator	QA/QC Engineer	Admin Asst	Quincy Total Hours	QEI Total Labor Dollars			WRECO	SWCA	FUGRO	Subconsultant Subtotal
		MR	GM	RK	DMo	AC	JC	MP	RR	KG	MQ	PJ								
	Initial Hourly Rate	$74.38	$54.46	$29.14	$51.88	$39.80	$46.62	$66.50	$26.54	$61.45	$67.92	$31.56								
1	Task 1 - Project Management	90	30		40							8	168	$10,656						$0
2	Task 2 - Preliminary Engineering	12	8	16	24	100		16	24				200	$8,721						$0
3	Task 3 - Hydrology & Hydraulics				12	4							16	$782			$11,200			$11,200
4	Task 4 - Geotechnical Investigations & Reports				12	8							20	$941					$48,168	$48,168
5	Task 5 - Utility Coordination		8	4	2	4							18	$815						$0
6	Task 6 - Environmental Clearance & Permit Applications	8	32		24								64	$3,583				$30,294		$30,294
7	Task 7 - Project Feasibility/Type Selection Report	8	10		16	32							66	$3,243						$0
8.1	Task 8.1 - Final Design & Detailing	16	24	60	50	110		50	120				430	$17,727						$0
8.2	Task 8.2 - Independent Check				8		60						68	$3,212						$0
8.3	Task 8.3 - Specifications	12	8		16					80			116	$7,074						$0
8.4	Task 8.4 - Construction Quantities & Estimate	2	8	8	8	40	40						106	$4,689						$0
8.5	Task 8.5 - Quality Control & Constructibility Review	4									32		36	$2,471						$0
8.6	Task 8.6 - Preparation of 95% PS&E	4	8	16	8	16			8				60	$2,464						$0
8.7	Task 8.7 - Submittal of 95% (Draft) PS&E	4	4	2	2	2				2			16	$880						$0
8.8	Task 8.8 - 100% PS&E (Final Signed Submittal)	2	12		12								26	$1,425						$0
9	Task 9 - Right-of-Way Assistance		4										4	$218						$0
10.1	Task 10.1 - Bidding Assistance	8	16		16	4							44	$2,456						$0
	Optional Scope of Services																			
4	FEMA CLOMR (Optional Task)	2	2		0								4	$258			$6,200			
6	Memorandum of Agreement (Optional Task)	2			2								4	$253				$3,905		
10.2	Task 10.2 - Construciton Support (Optional)												0	$0						$0
													1466							0
													$71,867	$71,867			$17,400	$34,199	$48,168	$99,767
	Subtotal- Hours	174	174	106	252	320	100	66	152	82	32	8								
	Other Direct Costs																			
	Total Cost	$12,942	$9,476	$3,089	$13,074	$12,736	$4,662	$4,389	$4,034	$5,039	$2,173	$252								

Note: Invoices will be based upon actual QEI hourly rates plus overhead at 159.5% plus prorated portion of fixed fee. Subconsultant and Direct Costs will be billed at actual cost.

Exhibit 10-H Cost Proposal

Cost Proposal

Contract No. San Luis Obispo County Estrella River Bridge Rehabi Date 11/4/2014

Consultant Quincy Engineering, Inc.

DIRECT LABOR

Classification	Name	Initials	Range	Hours		Initial Hourly Rate	Total
Principal Eng.	Mark Reno	MR	$60-$75	174	@	$ 74.38	$ 12,942.12
Senior Eng.	Garrett McLaughlin	GM	$45-$65	174	@	$ 54.46	$ 9,476.04
Assist Eng.	Ryan Kotey	RK	$25-$45	106	@	$ 29.14	$ 3,088.84
Senior Eng.	Danny Mossman	DMo	$45-$65	252	@	$ 51.88	$ 13,073.76
Assoc Eng.	Andy Chou	AC	$30-$50	320	@	$ 39.80	$ 12,736.00
Assoc Eng.	Jason Chou	JC	$30-$50	100	@	$ 46.62	$ 4,662.00
Senior Eng.	Martin Pohll	MP	$45-$65	66	@	$ 66.50	$ 4,389.00
Drafter	Rich Ramirez	RR	$20-$45	152	@	$ 26.54	$ 4,034.08
Senior Eng.	Kelly Gallagher	KG	$45-$65	82	@	$ 61.45	$ 5,038.90
Senior PM	Mario Quest	MQ	$55-$70	32	@	$ 67.92	$ 2,173.44
Admin Asst	Phyllis Jordan	PJ	$12-$40	8	@	$ 31.56	$ 252.48
						Subtotal Direct Labor Costs	$ 71,866.66
						Anticipated Salary Increases (3.0%)	$ 2,156.00
						Total Direct Labor Costs	$ 74,022.66

INDIRECT COSTS	Rate	Total
Overhead	159.50%	$118,066.14
Fringe Benefit (Included in OH)	0.00%	
General & Administrative (Included in OH)	0.00%	
	159.50%	

Total Indirect Labor Costs $118,066.14

FEE (10.00%) (FIXED)

Total Fee $19,208.88

OTHER DIRECT COSTS				Rate	Total
Travel (Engineering)	610 Miles Roundtrip (	3660	miles @	$0.56	$2,049.60
Pier Diem/ Hotel	3 nights for two ppl	6	days @	$150.00	$900.00
Delivery		5	@	$20.00	$100.00
Mounting Boards for Presentations					$1,200.00

Total Other Direct Costs $4,249.60

TOTAL COSTS $215,547.28

Cost Proposal

San Luis Obispo County Estrella River Bridge Rehabilitation

S13-900

Date: 11/4/2014

	Quincy Engineering, Inc.			
	Direct Labor:			$71,866.66
	Escalation for Multi-Year Project (3.0%):			$2,156.00
	Total Direct Labor Costs			$74,022.66
	Overhead (1.595):			$118,066.14
A.	Labor Subtotal			$192,088.80
	Subconsultant Costs:			
	WRECO			$17,400.00
	SWCA			$34,198.98
	FUGRO			$48,168.00
				$0.00
				$0.00
B.	Subconsultant Subtotal			$99,766.98
	Other Direct Costs:			
	Travel (Engineering)	3660 miles @	$0.560	$2,049.60
	Pier Diem/ Hotel	6 days @	$150.00	$900.00
	Phone/Fax			
	Delivery	5 @	$20.00	$100.00
	Printing: Blue Line			
	Vellum			
	81/2 X 11 Reproduction			
	11 X 17 Reproduction			$0.00
	Mounting Boards for Presentations			$1,200.00
	Newsletters (Translation and printing)			
	Title Report			
	Mailings (6x)			
C.	Direct Cost Subtotal:			$4,249.60
	Labor Subtotal A. =			$192,088.80
	Fixed Fee (10.0%):			$19,208.88
	Subconsultant Subtotal B. =			$99,766.98
	Fixed Fee (0.0%):			$0.00
	Direct Cost Subtotal: C. =			$4,249.60
	Fixed Fee (0.0%):			$0.00

TOTAL COST TO COMPLETE =	**$315,314.26**
TOTAL EXPENDED TO DATE UNDER PREVIOUS SCOPE OF WORK =	**$198,949.03**
NEW TOTAL CONTACT AMOUNT =	**$514,263.29**

Note: Invoices will be based upon actual QEI hourly rates plus overhead at 159.5% plus prorated portion of fixed fee. Subconsultant and Direct Costs will be billed at actual cost.

WRECO
1243 Alpine Road, Suite 108
Walnut Creek, CA 94596

River Grove Road Bridge Rehabilitation Project

Man-Hour and Fee Estimate for WRECO Tasks
Prepared for San Luis Obispo County
Prepared by WRECO

July 11, 2014

Man-Hours

Task	Task Description	Principal Engineer	Supervising Engineer	Senior Engineer	Associate Engineer	Staff Engineer	Senior Technician	Project Coordinator	Subtotal Hours
1	Data Review								0
2	Field Reconnaissance								0
3	Hydrologic Analyses								0
4	Hydraulic Analyses	1		2	4	12	2		21
5	Location Hydraulic Study	1	1	2	12			1	17
6	Scour Analyses and Countermeasure	1		4	8	2			15
7	Bridge Design Hydraulic Study	1	1	4	8	16	2	1	33
8	Project Meetings	2		8					10
9	FEMA CLOMR *(optional)*	2	2	8	24	16	2	2	56
	Subtotal	6	2	20	32	30	4	2	96
	Subtotal with Optional task	8	4	28	56	46	6	4	152

Fee

Labor Cost

	Basic Tasks			With Optional Task		
	Hours	Hourly Rate	Fee	Hours	Hourly Rate	Fee
Principal Engineer	6	$ 86.00	$ 516.00	8	$ 86.00	$ 688.00
Supervising Engineer	2	$ 71.09	$ 142.18	4	$ 71.09	$ 284.36
Senior Engineer	20	$ 48.78	$ 975.60	28	$ 48.78	$ 1,365.84
Associate Engineer	32	$ 43.77	$ 1,400.64	56	$ 43.77	$ 2,451.12
Staff Engineer	30	$ 33.82	$ 1,014.60	46	$ 33.82	$ 1,555.72
Technician	4	$ 26.92	$ 107.68	6	$ 26.92	$ 161.52
Project Coordinator	2	$ 25.00	$ 50.00	4	$ 25.00	$ 100.00
Subtotal Direct Labor	96		$ 4,206.70			$ 6,606.56
Overhead Rate (128.49%)	Total Overhead, Fringe, G&A		$ 5,405.19			$ 8,488.77
	Total Direct Labor and Indirect Cost		$ 9,611.89			$ 15,095.33
Fix Fee (10%)		**Total Fee**	$ 961.19			$ 1,509.53
Expenses (ODC)						
Travel + Per Diem			$ -			$ 40.00
Office Misc. + Reproduction			$ 627.00			$ 755.00
		Total ODC	$ 627.00			$ 795.00
		Total Basic Task	**$ 11,200**		**Total Cost with Optional Task**	**$ 17,400**

County of San Luis Obispo/Quincy Engineering
River Grove over Estrella River Bridge Retrofit
Mud Rotary Drilling Approach

FUGRO CONSULTANTS, INC.
CONTRACT SUMMARY

CONTRACT No. | **CONSULTANT COST PROPOSAL**
SUB CONSULTANT: Fugro Consultants, Inc. | 28-Oct-14

DIRECT LABOR

Name	Classification	Hours	Rate*	Total
Gregory Denlinger	Principal Engineer	24	$ 55.46	$ 1,331.04
Lori Prentice	Principal Geologist	2	$ 55.31	$ 110.62
Jerko Kocijan	Associate Engineer	4	$ 52.24	$ 208.96
Gresh Ekrich	Sr. Project Engineer	50	$ 41.00	$ 2,050.12
Loree Berry	Sr. Project Engineer	4	$ 40.19	$ 160.76
Justin Martos	Sr. Staff Engineer	100	$ 27.68	$ 2,768.00
Brendan Egan	CADD Operator	16	$ 40.00	$ 640.00
Janet Almaraz	Word Processor	10	$ 18.76	$ 187.60
		210	Total Hours	

*Raw labor rates as of February 2014
Rates will be charged at payroll rate at the time of work

Subtotal Direct Labor Costs $ 7,457.10
Anticipated Salary Increases $ -

TOTAL - Direct Labor $ 7,457.10

INDIRECT COSTS

	Rate*	Total
Overhead	178.840%	$ 13,336.28
Fringe Benefit	0.00%	$ -
General & Administrative	0.00%	$ -
	178.84%	

*2012 audited rates. Latest available rate.

TOTAL - Indirect Costs $ 13,336.28

FEE (10.00%) TOTAL - Fee $ 2,079.34

OTHER DIRECT COSTS

		Units	Rate	Total
Drill Rig Mob./Demob. (lump sum)	Estimate - Billed At-Cost	1	3,100	$ 3,100.00
HSA Drill Rig Onsite (footage rate assume 10 ft of drilling)	Estimate - Billed At-Cost	10	39	$ 390.00
Mud Drill Rig Onsite (footage rate assume 170 ft of drilling)	Estimate - Billed At-Cost	170	31	$ 5,270.00
Drill Rig Support Equipment (days)	Estimate - Billed At-Cost	3	405	$ 1,215.00
Drill Rig Crew Per Diem (days)	Estimate - Billed At-Cost	3	350	$ 1,050.00
Water Meeter and Water Usage	Estimate - Billed At-Cost	1	500	$ 500.00
Drill Hole Grouting/Backfil (per ft, est 170 ft of mud rotary)	Estimate - Billed At-Cost	170	5	$ 850.00
Transport and Disposal of Drill Fluids/Cuttings (lump sum)	Estimate - Billed At-Cost	1	2,500	$ 2,500.00
Screening/Analytical Testing of Drill Fluids/Cuttings	Estimate - Billed At-Cost	1	800	$ 800.00
Traffic Control (per day 2-person,flagging,signs,cones)	Estimate - Billed At-Cost	2	1,300	$ 2,600.00
Laboratory Testing (per fee schedule rates)				$ 7,000.00
Outside Copies, Overnight (reimbursable)				$ 20.00

TOTAL - Other Direct Costs $ 25,295.00

TOTAL COST $ 48,168.00

SWCA
ENVIRONMENTAL CONSULTANTS
Sound Science. Creative Solutions.

County of San Luis Obispo
River Grove Bridge Replacement Project

SWCA, Incorporated

CONTRACT No. _____

COST PROPOSAL
October 31, 2014

DIRECT LABOR

Name	Classification	Hours	Actual Hourly Rate	Total
Claxton, Jon	Project Manager/Biologist	41	$ 39.75	$ 1,630
Ruggerone, Gary	NEPA Specialist	16	$ 39.75	$ 636
Creel, Emily	Planner	90	$ 30.00	$ 2,700
Carmack, Shannon	Architectural Historian	60	$ 45.60	$ 2,736
Treffers, Steven	Architectural Historian	76	$ 30.29	$ 2,302
Neal, Adriana	Graphics Specialist	25	$ 30.00	$ 750
Jones, Jaimie	Technical Editor	11	$ 26.00	$ 286
	Total Hours	319		

	Subtotal Direct Labor Costs	$	11,039.79
0%	**Anticipated Salary Increases**	$	-
	TOTAL - Direct Labor	**$**	**11,039.79**

INDIRECT COSTS

	Rate	Total
Overhead	175.87%	$ 19,415.68
Fringe Benefit (Included in OH)	49.04%	
General & Administrative (Included in OH)	Not Available	

	TOTAL - Indirect Costs	**$**	**19,415.68**
FEE (10.00%)	**TOTAL - Fee**	**$**	**3,045.55**
	Labor Total	**$**	**33,501.02**

OTHER DIRECT COSTS

Description	Unit			Rate	Total
Car Rental	*per day*	2	@	$75.00	$ 150.00
Lodging	*per night*	1	@	$150.00	$ 150.00
Per Diem	*per day*		@	$46.00	$ -
Records Search	*lump sum*	0	@	$700.00	$ -
Photocopies B&W	*per page*	1775	@	$0.10	$ 177.50
Photocopies Color	*per page*	130	@	$1.00	$ 130.00
Overnight Service	*per package*		@	$20.00	$ -
Graphic Presentation Boards	*per presentation*		@	$100.00	$ -
Subconsultant Costs (detailed cost proposal in same format attached)					$ -
				Subtotal Direct Costs	$ 607.50

ODC MU @ 15%		91.13
		698.63
TOTAL COST	**$**	**34,199.64**

Project Budget Summary

SWCA

Project Name:	River Grove
Project No.:	29979
Annual Rate Escalation:	0%
Project Start (est.):	12/1/2014
Project End (est.):	12/31/2016

LABOR

Totals — Total All Phases

Discipline	Level	Rate	Hours	Charge	% of Total Project	% of Labor Hrs	% of Lbr Charge
Environmental Resources	Specialist VII	$ 120.62	41.00	$ 4,945	14.5%	12.9%	14.8%
Environmental Resources	Specialist VII	$ 120.62	16.00	$ 1,930	5.6%	5.0%	5.8%
Environmental Resources	Specialist V	$ 91.04	90.00	$ 8,193	24.0%	28.2%	24.5%
Cultural Resources	Specialist IX	$ 138.37	60.00	$ 8,302	24.3%	18.8%	24.8%
Cultural Resources	Specialist V	$ 91.91	76.00	$ 6,985	20.4%	23.8%	20.9%
GIS/CADD	Specialist V	$ 91.04	25.00	$ 2,276	6.7%	7.8%	6.8%
Planning	Specialist II	$ 78.90	11.00	$ 868	2.5%	3.4%	2.6%
Labor Subtotal			319.00	$ 33,500	98.0%	100.0%	
Communication Fee - % of Labor		0%		$ -	0.0%		
Labor Total			319.00	$ 33,500.35	98.0%		

Discipline	Level	Project Management Hours	Project Management Charge	Farmlands Review Hours	Farmlands Review Charge	Visual Impact Assessment Hours	Visual Impact Assessment Charge	Finding of Effect Hours	Finding of Effect Charge
Environmental Resources	Specialist VII	32.00	$ 3,860	-	$ -	-	$ -	-	$ -
Environmental Resources	Specialist VII	-	$ -	-	$ -	-	$ -	-	$ -
Environmental Resources	Specialist V	-	$ -	24.00	$ 2,185	8.00	$ 728	-	$ -
Cultural Resources	Specialist IX	-	$ -	-	$ -	-	$ -	40.00	$ 5,535
Cultural Resources	Specialist V	-	$ -	-	$ -	-	$ -	64.00	$ 5,882
GIS/CADD	Specialist V	-	$ -	4.00	$ 364	4.00	$ 364	-	$ -
Planning	Specialist II	-	$ -	1.00	$ 79	1.00	$ 79	-	$ -
Labor Subtotal		32.00	$ 3,860	29.00	$ 2,628	13.00	$ 1,171	104.00	$ 11,417
Communication Fee - % of Labor			$ -		$ -		$ -		$ -
Labor Total		32.00	3,859.97	29.00	2,627.94	13.00	1,171.34	104.00	11,417.25

Discipline	Level	Section 4(f) Hours	Section 4(f) Charge	CEQA Document Hours	CEQA Document Charge	Memorandum of Agreement Hours	Memorandum of Agreement Charge	NEPA Document Support Hours	NEPA Document Support Charge
Environmental Resources	Specialist VII	-	$ -	8.00	$ 965	-	$ -	1.00	$ 121
Environmental Resources	Specialist VII	16.00	$ 1,930	-	$ -	-	$ -	-	$ -
Environmental Resources	Specialist V	4.00	$ 364	50.00	$ 4,552	-	$ -	4.00	$ 364
Cultural Resources	Specialist IX	-	$ -	-	$ -	20.00	$ 2,767	-	$ -
Cultural Resources	Specialist V	-	$ -	-	$ -	12.00	$ 1,103	-	$ -
GIS/CADD	Specialist V	4.00	$ 364	12.00	$ 1,092	-	$ -	1.00	$ 91
Planning	Specialist II	1.00	$ 79	8.00	$ 631	-	$ -	-	$ -
Labor Subtotal		25.00	$ 2,737	78.00	$ 7,240	32.00	$ 3,870	6.00	$ 576
Communication Fee - % of Labor			$ -		$ -		$ -		$ -
Labor Total		25.00	2,737.18	78.00	7,240.48	32.00	3,870.37	6.00	575.81

EXPENSES

Description	Unit	Rate	# Units	Charge	% of Total Project
Car Rental	per day	$ 75.00	2	$ 150	0.4%
Lodging	per night	$ 150.00	1	$ 150	0.4%
Copies (B&W)	per page	$ 0.10	1,775	$ 178	0.5%
Copies (Color)	per page	$ 1.00	130	$ 130	0.4%
Other Expenses (actuals)					
Expenses Subtotal				$ 608	1.8%
Markup		15%		$ 91	0.3%
Per Diem	per day	$ 46.00	-	$ -	0.0%
Expenses Total				$ 698.63	2.0%
Project Phase Totals				$ 34,198.98	

Description	Project Management # Units	Project Management Charge	Farmlands Review # Units	Farmlands Review Charge	Visual Impact Assessment # Units	Visual Impact Assessment Charge	Finding of Effect # Units	Finding of Effect Charge
Car Rental	-	$ -	-	$ -	-	$ -	2.00	$ 150
Lodging	-	$ -	-	$ -	-	$ -	1.00	$ 150
Copies (B&W)	-	$ -	50.00	$ 5	25.00	$ 3	500.00	$ 50
Copies (Color)	-	$ -	10.00	$ 10	10.00	$ 10	25.00	$ 25
Other Expenses (actuals)	-	$ -	-	$ -	-	$ -	-	$ -
Expenses Subtotal		$ -		$ 15		$ 13		$ 375
Markup		$ -		$ 2		$ 2		$ 56
Per Diem	-	$ -	-	$ -	-	$ -	-	$ -
Expenses Total		$ -		$ 17		$ 14		$ 431
Project Phase Totals		$ 3,860		$ 2,645		$ 1,186		$ 11,848

Description	Section 4(f) # Units	Section 4(f) Charge	CEQA Document # Units	CEQA Document Charge	Memorandum of Agreement # Units	Memorandum of Agreement Charge	NEPA Document Support # Units	NEPA Document Support Charge
Car Rental	-	$ -	-	$ -	-	$ -	-	$ -
Lodging	-	$ -	-	$ -	-	$ -	-	$ -
Copies (B&W)	100.00	$ 10	1,000.00	$ 100	100.00	$ 10	-	$ -
Copies (Color)	15.00	$ 15	50.00	$ 50	20.00	$ 20	-	$ -
Other Expenses (actuals)	-	$ -	-	$ -	-	$ -	-	$ -
Expenses Subtotal		$ 25		$ 150		$ 30		$ -
Markup		$ 4		$ 23		$ 5		$ -
Per Diem	-	$ -	-	$ -	-	$ -	-	$ -
Expenses Total		$ 29		$ 173		$ 35		$ -
Project Phase Totals		$ 2,766		$ 7,413		$ 3,905		$ 576

Note: Communication expense is not subject to 15% administrative fee.

TOTAL PROJECT	Charges
SWCA Labor Total	33,500.35
Expenses Total	698.63
Subcontractors Total	0.00
Total Project	34,198.98
Tax Total	0.00
Total Including Taxes	34,198.98

Team Organization

Names in **Bold** = Key Staff
*Indicates DBE Team Member

County of San Luis Obispo

Cori Marsalek | Project Manager

QA/QC & Constructibility Review
John S. Quincy, P.E.
J. Kerry Theran, P.E.
• QA/QC Implementation • Coordination •

Project Manager
Mark L. Reno, P.E.
• Scope Development • Scope Management • Resource Coordination • Schedule Management • Budget Control • Value Engineering • Preliminary Engineering • Agency Coordination • Utility Coordination • Community Outreach • PS&E • Construction Support • Funding Assistance •

Principal in Charge
Brent Lemon, P.E.
• Oversight • Resource Allocation • Team Assignments • Funding Adherence • Process Protocol •

Bridge Project Engineer
Danny Mossman, P.E.

Roadway Project Engineer
Garrett McLaughlin, P.E.

• Design Standards • Design Team Assignments • Technical Responsibility • Engineer of Record •

Design Engineering Staff
Roadway • Kelly Gallagher, P.E. • Meggie Elledge, P.E. • Ryan Kotey, E.I.T. • Craig Polglase •
Bridge • Mario Quest, P.E. • Martin Pohl S.E., P.E. • Jason Chou, P.E. • Andy Chou, P.E. •

• Preliminary & Final Design • PS&E • Independent Design Check • Quantities • Estimates • Construction Support •

Specifications/Estimate
Kelly Gallagher, P.E.
Maxwell Katt, P.E.

SWCA
Environmental, Permits & Landscape Mitigation
Jon Claxton
Gary Rugerone
Other Staff As Needed

Utility Coordination
by Quincy Engineering, Inc.

wreco
**Hydraulics/Hydrology (UDBE)*
Han-Bin Liang, Ph.D., P.E.
Other Staff as Needed

McMillan
Surveying/ROW Engineering
Keith McMillan, L.S.

Right-of-Way Acquisition
by County

Fugro
Geotechnical
Gregory Denlinger, P.E., G.E.
Gresham Eckrich, P.E., G.E., C.E.G.
Other Staff As Needed